

# COMPUTER SCIENCE

in

# ARKANSAS



# **REGIONAL & STATE CODING COMPETITION**

The fourth annual All-Region and All-State Coding Competition sponsored by Verizon was held on Feb. 28, 2020 at Education Service Cooperatives and at UALR within Pulaski County. This competition is open to Arkansas public school, private school, and homeschool students in grades 8-12, with more than 350 students in 130 teams competing this year.

This event brings hundreds of students to the coding arena where they will pit their wits, knowledge, and coding skills against challenge questions developed specifically for this competition. For a three-hour window, this frantic challenge allowed the students to demonstrate their coding brilliance, in an attempt to earn an invitation to the Governor's All-State Coding Competition. The sole exception was ASMSA, the All-State winner from the previous year who automatically received an invitation.

This year's state competition is Saturday, May 2, 2020. The competition will be held at the University of Arkansas at Little Rock. State Contest Rules can be found here: Official Rules

# CAREER & TECHNICAL EDUCATION DAY



CTE teachers and students gathered at the Capitol on February 11th to celebrate outstanding work in CTE programs throughout the state. Booths were set up to showcase student programs in Agriculture, Business, Photography, Drone-Flying, and many others.

Governor Hutchinson spoke before the crowd about the importance of STEM fields and Career and Technical Expertise. He visited each booth to talk with students and educators. With the Governor were several Representatives who walked through the Gallery and stopped to hear about the extensive work going on throughout the state.



After the meeting in the Capital, CTE teachers and ADE Representatives toured the Innovation Hub in Little Rock, a non-profit organization dedicated to improving the lives of Arkansans by inspiring innovation and expanding opportunities. The teachers and representatives were given a tour of the facility, including walking through several after-school programs, including one where elementary students were working with clay and another where older students were drafting projects with both wood and metal. Several Arkansas entrepreneurs were also working on projects utilizing a large-scale CNC machine for cutting wood, 3D printers, and etchers.



# AP CSA STUDENT DAY

It's time for the AP CSA Student Day! This session on March 16, 2020, will focus on getting ready for the AP CSA Exam.

There will be a main session being taught and live-streamed from Dawson Education Cooperative with satellite locations offered at various coops.

There is an attendance limit for each coop and it will be a first come first serve. The teacher of record MUST be in attendance with the students.

Please click the link below for registration: <a href="http://bit.ly/APCSASTUDENTDAY20">http://bit.ly/APCSASTUDENTDAY20</a>

# CS SPECIALIST SPOTLIGHT

Leslie Savell's first introduction to technology was in elementary school and she has been in love ever since. Savell said her sixth-grade teacher let her go to the high school and work with the computer teacher to make a video game because she had shown interest. Quickly, she learned the power of computers and how they allowed her to create. Fascinated, she felt no limit to her imagination for the first time. She explained that this is the primary reason she is so passionate about sharing computer science with students and teachers.

"My path to education was a non-traditional route starting as a computer systems analyst and programmer. However, education seemed like a great fit for allowing me to pursue a career and take care of my family." When given the opportunity to combine those and work for an initiative that she believed in, she jumped at the chance.

"I am so passionate about this initiative! Computer science is a skillset our kids need for their futures. It's imperative that they be able to work in a technological world because technology is touching every field. We want to make sure they can attain whatever they desire for their future. Experience with technology will open doors for them and I want us to leverage that to build a brighter future!"

Savell said, "My favorite part of doing model lessons in schools is the engagement from the kids. They love technology and learning about it. It's always such a blessing to hear them ask for more, but even more exciting to me is to see their teachers be absolutely amazed at how much their kids love it!"

Her favorite CS event is an area event she designed and hosts annually called SWKidsCanCode. She said that it is a great opportunity to work with her teachers and allow them to show off their coding skills and work with other schools in our area. She added, "Plus, it's a lot of fun!"

If you'd like to know more about any Savell's activities, or just want to know more about wearable tech (a hobby of hers), reach out to her at leslie.savell@swaec.org.

### **SWAEC HACKATHON**

Area districts attended the Southwest Arkansas Education Service Cooperative annual Hackathon on January 30th. The students explored numerous computer science activities including Virtual Reality Simulations, physical Lockpicking, and physical and digital Escape Room Challenges. The students also competed in Pin Code Generators, Encryption and Decryption, as well as challenges specific to Lego, Micro:bit, and Debugging. All activities feature some aspect of collaboration and team-building. Students could also sign up for a preview of the University of Arkansas at Little Rock's new Cyber Gym to be released later this year.

A highlight of the event was when the Department of Federal Bureau of Investigation (FBI) sent two of their computer science forensics team members to speak with students about the field of computer science and opportunities within the bureau and cyber crime.

During the awards ceremony, Genoa Central swept the competition by coming in First, Second and Third! Great Job to Genoa Central and all the students and districts that received character recognition awards.

Video highlights of the event can be found here.





1st- (top), 2nd- (mid) and 3rdplace (bottom) teams, all from Genoa.

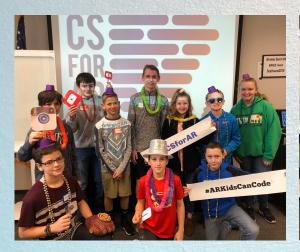
### **SWKIDSCANCODE**

Southwest Education Cooperative (SWAEC) hosted its annual event SWAEC KidsCanCode. The event was held on March 3rd for 2-5 grades, and March 4th for 6-8 grades in Hope, AR. This is the first year to have included the elementary grade band.

Each grade band had level-specific challenges utilizing some of following devices/languages: Code & Go Mice, Dash robots, Ozobots, Scratch programming, Lego WeDo, Lego EV3, Sphero, and Micro:bits.

In between robotic competitions, there were various computer sciencerelated activities for the students to participate in, such as; augmented reality, problem-solving games, a Turtle-stitch embroidery machine station, vinyl station, minute-to-win-it games, and much more.

Click here to see a short video highlighting the event and its participants!











# IT'S NOT TOO LATE TO WIN CASH AND PRIZES BY CELEBRATING ARKANSAS HISTORY!



The First Great Arkansas History Video Game Coding Competition began in January 2020. The competition emphasizes storytelling, state history, and coding, and gives students the ability to use their coding abilities while supporting literary growth and expanding their knowledge of Arkansas history.

It's not too late to start! Visit <a href="http://bit.ly/ARCSHistComp">http://bit.ly/ARCSHistComp</a> for more information.

This year's theme: The Role of the Civilian Conservation Corps within the creation of Arkansas State Parks. The CCC--part of Roosevelt's New Deal--was a major contributing factor in the development to Arkansas State Parks System. In regions all over Arkansas, these young men worked in earnest to build the foundation of many of the parks still serving the state.

"Most CCC projects in Arkansas were in national forests or on state-owned property. The fledgling state parks system benefited greatly; the work program created roads, trails, lodges, cabins, campgrounds, amphitheaters, bathhouses, picnic pavilions, and beaches at six locations in four different regions of the state: Petit Jean, Mount Nebo, Crowley's Ridge, Devil's Den, Lake Catherine, and Buffalo Point."



Information gathered from: https://encyclopediaofarkansas.net/entries/civilian-conservation-corps-2396/

### CYBER SECURITY 0: NETWORKING FUNDAMENTALS



Arkansas School for Math, Science and Arts in Hot Springs hosted a Cyber Security and Networking Fundamentals professional development on February 6th-8th. This event was funded by a grant from the Arkansas Department of Education.

This three-day, hands-on workshop introduced participants without networking background to the fundamentals of computer networking. Participants learned how machines communicate by constructing cables, connecting devices, configuring systems, and sending messages. They explored the roles of protocols through hands-on role-play activities, and then observed actual protocols in network traffic as computers retrieved web pages and exchanged emails.

#### APPS FOR GOOD FESTIVAL

Who: YOU! And your students!

When: Thursday, April 16, 2020 from 10 am - 2 pm

Where: Arkansas Regional Innovation Hub (North Little Rock, AR)

What: An opportunity for student teams to showcase technologies they have created with code that addresses a problem and to interact with peers and industry professionals.

If your students have created an app for the Congressional App Challenge last semester or through the Apps for Good program, this is a great way for them to display their work! Final Registration deadline is March 13. Any questions about the event should be sent to Mr. Steve Rice, ASMSA Entrepreneurship Instructor, at rices@asmsa.org.

# Would you like some Pi with that?: An Introduction to Physical Computing with the Raspberry Pi

Open to any teacher, but especially 7-8, who is interested in learning about physical computing and beginner-friendly programming.

3/05 - Arch Ford

3/11 - Crowley's Ridge

3/11 - Southwest

3/12 - Northcentral

3/19 - Northeast

4/08 - Northwest

4/22 - Guy Fenter

### UPCOMING EVENTS

http://bit.ly/CSPD4All

Arduino: An Introduction to Physical Computing

Open to any teacher, but especially 7-8, who is interested in learning about physical computing and beginner-friendly programming.

3/11 - Southeast

3/12 - Wilbur D. Mills

4/21 - O.U.R.

#### **Taco-bout Coding with Scratch!**

Looking for new ways to get your students excited and engaged through computer science? Do you love Tacos? This nachoaverage training will focus on Scratch, a free online block-based coding program. Participants will work through activities that they can take back to their classroom.

3/06- Southwest

3/09 - Arkansas River

3/10 - Southeast

3/11 - Great Rivers

4/06 - Arch Ford

4/07 - Northcentral

4/08 - Crowley's Ridge

4/09 - O.U.R.

### **CONTACT US**

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### **SOCIAL MEDIA**

#ARKidsCanCode #CSforAR



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